

Amendments to the Drawings:

The attached sheet(s) of drawings includes changes to Fig. 2 and the addition of Fig. 6. These sheets, which include Figs. 1-4 and Fig. 6, replaces the original sheet including Figs. 1-4 and add an additional sheet which includes Fig. 6.

Attachment: Replacement Sheet and Additional Sheet

Remarks

Claims 1-20 are pending in the application, of which claims 11-16 are withdrawn from consideration and claims 1-10 and 17-20 are rejected. By this paper, Applicants have amended claims 1-10, 17 and 19.

The drawings stand objected to because they fail to show the limitations of claims 17-20. Without waiver or prejudice, Applicants submit herewith corrected drawing sheets, including new Fig. 6, to overcome the objection. Therefore, Applicants respectfully request the Examiner to withdraw this objection.

The disclosure stands objected to because of certain informalities. Without waiver or prejudice, Applicants have amended paragraphs 23, 24 and 31 of the specification to overcome this objection. Therefore, Applicants respectfully request the Examiner to withdraw this objection.

The Examiner has rejected claim 8 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Without waiver or prejudice, Applicants have amended claim 8 to overcome this rejection. Therefore, Applicants respectfully request that the Examiner withdraw this rejection.

Claim 7 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Without waiver or prejudice, Applicants have amended claim 7 to overcome this rejection. Therefore, Applicants respectfully request the Examiner to withdraw this rejection.

Claims 1-10 and 17-20 stand rejected under 35 U.S.C. § 112 as being anticipated by each of several references. Claims 1-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Weiner* (U.S. 3,730,286). Claims 1-10 are also rejected under 35

U.S.C. § 102(b) as being anticipated by *Trommer et al.* (U.S. 5,566,777). Claims 1-10 and 17, 18 and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Uchikawa et al.* (U.S. 6,328,656). Claims 1-10 and 17-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Sato* (U.S. 5,946,977). Claims 1-10 and 17-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Okubo* (U.S. 6,022,047). Claims 1-10 and 17-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Uggla* (FR 616,929). Claims 1-3, 9, 10 and 17-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Larsen et al.* (U.S. 2,848,882). Claims 1-3, 9, 10 and 17-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Sundt* (U.S. 3,232,076). Claims 1-10 and 17-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Lutz* (U.S. 2003/0173765).

Amended claim 1 has limitations that “the depressed portion includ[es] tapered sides and a depressed exterior surface portion longitudinally extending between the tapered sides”, “the depressed exterior surface portion having a substantially uniform depressed exterior radius (Rd) extending the longitudinal length of the depressed exterior surface portion”, and “the tapered sides having an equal, substantially uniform taper angle (α_d).”

None of the references cited in support of the Examiner’s § 102 rejections or the other art of record disclose this combination of limitations. *Weiner* discloses a fillet 35 on each end of a depressed portion 17. The fillets 35 are not tapered sides, each having an equal, substantially uniform taper angle. *Trommer* discloses two inwardly directed flanks in which the angle of one of the flanks is greater than the angle of the other flank. In *Uchikawa*, a number of adjoining upgrade and downgrade surface pairs are disclosed (e.g. 14C and 15A of Figure 3). The adjoining upgrade and downgrade surfaces form a V-shaped cross section, without a depressed exterior surface portion having a substantially uniform depressed exterior radius (Rd) extending the longitudinal length of the depressed exterior surface portion.

The *Sato*, *Okubo*, *Uggla*, *Larsen*, *Sundt* and *Lutz* references, taken individually or in combination, do not disclose a depressed exterior surface portion having a substantially uniform depressed exterior radius (Rd) extending the longitudinal length of the depressed

exterior surface portion. Rather, these references either teach a V-shaped or U-shaped cross section without having the claimed longitudinal length of the depressed exterior surface portions. Thus, none of the references cited by the Examiner in support of the § 102 rejections or the other art of record anticipate amended claim 1. Claim 2-6 depend from claim 1 and therefore are not anticipated for at least the reasons stated above with reference to claim 1.

The references of record do not teach, disclose or suggest amended claim 17. Amended claim 17 has the limitation that “each of the number of depressed portions including tapered sides and a depressed exterior surface portion longitudinally extending between the tapered sides,” “depressed exterior surface portions each having a substantially uniform depressed exterior radius (Rd_1-Rd_n) extending the longitudinal length of each of the depressed exterior surface portions (Wd_1-Wd_n).” The references cited in support of the Examiner’s § 102 rejections do not disclose this limitation. *Uchikawa, Sato, Okubo* and *Uggla* each disclose a number of V-shaped sections, which do not include a substantially uniform depressed exterior radius extending the longitudinal length of each of the depressed exterior surface portions. *Larsen, Sundt* and *Lutz* each disclose U-shaped sections which do not disclose the claimed substantially uniform depressed exterior radius extending the longitudinal length of each of the depressed exterior surface portions. Thus, the references cited in support of the rejection of claim 17 do not anticipate for at least the reasons stated above. Claims 8, 9 and 18-20 depend from claim 17 and are therefore not anticipated for at least the reasons stated above with reference to claim 17.

Conclusion

Applicants have made a genuine effort to respond to the Examiner's objections and rejections in advancing the prosecution of this case. Applicants believe all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested.

Please charge the one month extension of time fee in the amount of \$120, as well as any additional fees or credit any overpayments as a result of the filing of this paper to Deposit Account 06-1510 (Ford Global Technologies, LLC).

Respectfully submitted,
YI (TONY) QU ET AL.

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